

**Ordering method**

**SXYx - S - A1 - 85 - 65 - ZRF - 15 - 3L - RCX142 - E - P1 - CC - S**

Model - Cable - Combination - X-axis stroke - Y-axis stroke - ZR-axis - Z-axis stroke - Cable length - Controller - Usable for CE - Option I/O - Network - Battery

A1 to A4 | 15 to 85 | 15 to 65 | 15 to 35 | 3L, 5L, 10L

Note : For the details of the controller, please refer to the catalog of Yamaha Controllers.

**Specification**

	X-axis	Y-axis	Z-axis	R-axis
Motor output	200W	100W	100W	50W
Repeatability <sup>Note 1</sup>	+/-0.01mm	+/-0.01mm	+/-0.01mm	+/-0.0083°
Drive system	Ball screw(Class C7)	Ball screw(Class C7)	Ball screw(Class C7)	Harmonic gear
Ball screw lead (Deceleration ratio)	20mm	20mm	10mm	(1/50)
Maximum speed <sup>Note 2</sup>	1200mm/sec	1200mm/sec	600mm/sec	360°/sec
Moving range	150 to 850mm	150 to 650mm	150 to 350mm	360°
Robot cable length	Standard : 3.5m Option : 5m, 10m			
Controller	RCX142			

**Maximum load capacity**

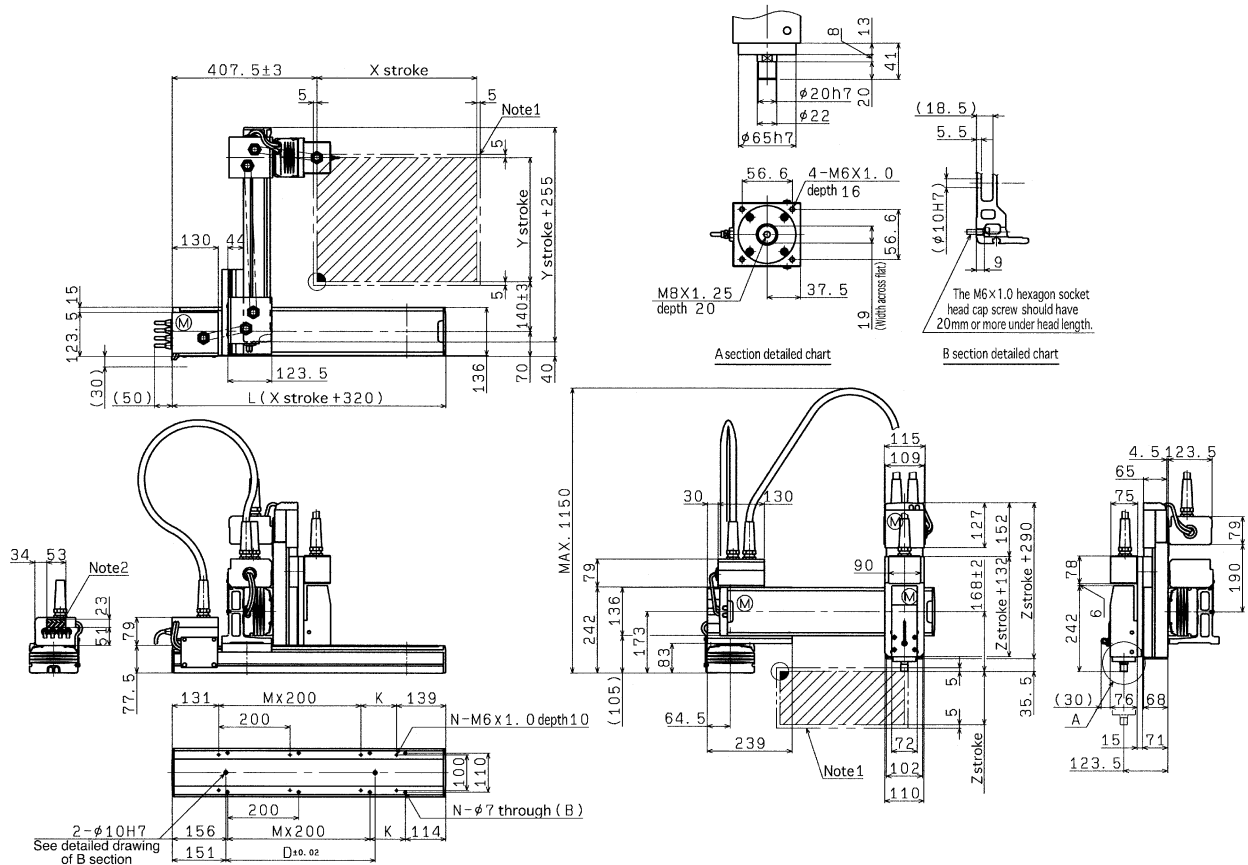
Y stroke	Z stroke		
	150mm	250mm	350mm
150mm	6kg	6kg	6kg
250mm	6kg	5kg	4kg
350mm	4kg	3kg	2kg
450mm	3kg	2kg	1kg
550mm	2kg	1kg	—
650mm	1kg	—	—

Note 1 : Repeatability for single oscillation.

Note 2 : When the X-axis stroke exceeds 750mm, resonance of a ball screw may occur depending on the operation range (dangerous speed). In such case, make an adjustment to reduce the speed using the corresponding parameter of program and referring to the table below for the maximum speed as a guide.

Axis	X-axis
Stroke (mm)	750 850
Maximum speed (mm/sec)	960 780
Speed setting	80% 65%

**A1**



X stroke	150	250	350	450	550	650	750	850
L	470	570	670	770	870	970	1070	1170
K	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960
M	0	1	1	2	2	3	3	4
N	4	6	6	8	8	10	10	12

Y stroke	150	250	350	450	550	650

Z stroke	150	250	350

Note 1 : The moving range when returning to origin and the stop position when stopping by the mechanical stopper.

Note 2 : Theshaded position indicates the port where the user cable is taken out.